Recovery Plan Action Status

Plan Name: Concho Water Snake

Plan Status: Final Plan Date: 27-Sep-93

Lead Agency: USFWS
Lead Office: Austin Ecological Services Field Office
490-0057)

| Species | Action Priority # | Action # | Action Description | Action Status | Est. Initiation Date | Est. Completion Date | Responsible Parties | Work Type | Labor Type | Action Comments |
|--|-------------------|----------|--|--------------------|----------------------|-------------------------|---|---|--------------------------------------|--|
| Concho water snake (Nerodia paucimaculata) | 2 | 1.1 | Monitor hydrology and physical habitat rangewide | Not Started | | | U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Texas Parks and Wildlife Department, Colorado River Municipal Water District | Management: Habitat Maintenance and Manipulation | Internal Administrative | Same costs estimated for all following years. FWS-ES costs = 2K/year. CRMWD costs = 10K/year. TPWD costs = 2K/year. USGS costs = 81K/year. |
| Concho water snake (Nerodia paucimaculata) | 1 | 1.2 | Protect and assure adequate instream flows rangewide | Partially Complete | FY 2008 | | U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Army Corps of Engineers, Texas Parks and Wildlife Department, Colorado River Municipal Water District, Texas Water Commission | Management: Habitat Maintenance and Manipulation | Labor type not yet selected | Same costs estimated for all following years. FWS-ES costs = 2K/year. CRMWD costs = 5K/year. TPWD costs = 1K/year. TWC costs = 40K/year. USACE costs = 5K/year. |
| Concho water snake (Nerodia paucimaculata) | 2 | 2.1 | Establish monitoring sites rangewide | Ongoing Current | FY 2009 | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department | Management: Population Monitoring | Contract, Internal Administrative | FWS-ES costs = 18K. TPWD costs = 7K. |
| Concho water snake (Nerodia paucimaculata) | 2 | 2.2 | Monitor 40 sites for 10 years | Obsolete | | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department, Colorado River Municipal Water District | Work type not yet selected | Labor type not yet selected | CRMWD only for 1st 3 years & subset of sites; CRMWD work includes monitoring required under 7; 18/yr for all following years split by FWS & TPWD. FWS-ES costs = 5K/year. CRMWD costs = 10K/year. TPWD costs = 5K/year. |

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| Concho water snake (Nerodia paucimaculata) | 2 | 2.3 | Assess and abate threats to water quality | Obsolete | | | U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Environmental Protection Agency, Texas Parks and Wildlife Department, Colorado River Municipal Water District, Texas Water Commission | Work type not yet selected | Labor type not yet selected | Same costs estimated for all following years. FWS-ES costs = 2K/year. CRMWD costs = 2K/year. TPWD costs = 2K/year. TWC costs = 2K/year. USEPA costs = 2K/year. |
| Concho water snake (Nerodia paucimaculata) | 2 | 3.1 | Enforce existing laws and regulations | Not Started | | | U.S. Fish and Wildlife Service, Law Enforcement Division, U.S. Army Corps of Engineers, Texas Parks and Wildlife Department, Colorado River Municipal Water District, Texas Water Commission | Other: Law Enforcement | Internal Field Assistance | Same costs estimated for all following years. FWS-LE costs = 1K/year. CRMWD costs = 3K/year. TPWD costs = 1K/year. TWC costs = 20K/year. USACE costs = 1K/year. |
| Concho water snake (Nerodia paucimaculata) | 2 | 3.2 | Protect through section 7 consultation | Ongoing Current | Prior to FY 1995 | | U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Federal Agencies | Other: Regulations | Internal Administrative, Internal Technical Assistance | Same costs estimated for all following years. USACE: CWA 404, USEPA: FIFRA & CWA. FWS-ES costs = 5K/year. USACE costs = 3K/year. USEPA costs = 3K/year. |
| Concho water snake (Nerodia paucimaculata) | 3 | 4.1 | Evaluate & reintroduce snakes above San Angelo | Obsolete | | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department, Bureau of Reclamation | Work type not yet selected | Labor type not yet selected | FWS-ES costs = 2K/year. BR costs = 25K/year. TPWD costs = 2K/year. |
| Concho water snake (Nerodia paucimaculata) | 3 | 4.2 | Evaluate & reintroduce snakes above San Angelo | Obsolete | | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department, Bureau of Reclamation | Work type not yet selected | Labor type not yet selected | FWS-ES costs = 1K. BR costs = 5K. TPWD costs = 1K. |

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| Concho water snake (Nerodia paucimaculata) | 3 | 4.3 | Evaluate sites rangewide, reintroduce, monitor 10 years | Obsolete | | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department | Work type not yet selected | Labor type not yet selected | Future costs same as year 3 for following 9 years. Costs may be higher if habitat enhancement needed. FWS-ES costs: FY1&2 = 3K/year. FY3 = 2K. TPWD costs: FY1&2 = 3K/year. FY3 = 2K. |
| Concho water snake (Nerodia paucimaculata) | 2 | 5 | Translocate and monitor snakes among Concho, lower Colorado & upper Colorado rivers | Ongoing Current | FY 1995 - FY 1999 | | Colorado River Municipal Water District | Management: General | Contract, Internal Field Assistance, Species Expert | 5 yr cycle starts 1995. 8/yr for cycle years 2, 3, 4, 5 |
| Concho water snake (Nerodia paucimaculata) | 3 | 6 | Develop and implement post-recovery monitoring plan | Ongoing Current | FY 2009 | | U.S. Fish and Wildlife Service, Ecological Services Division, Texas Parks and Wildlife Department | Management: Population Monitoring | Contract, Graduate Student | USFWS 35 total TPWD 10 total for 5 years post- recovery. |